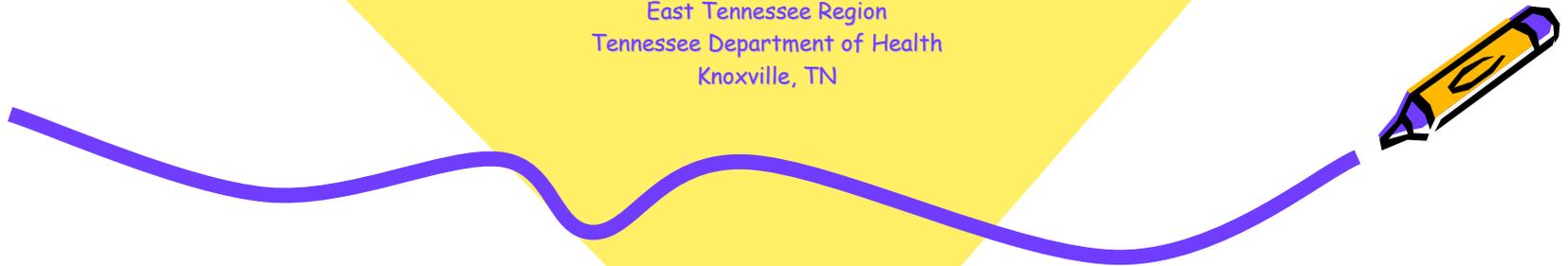


# Indoor Air Quality in Schools:

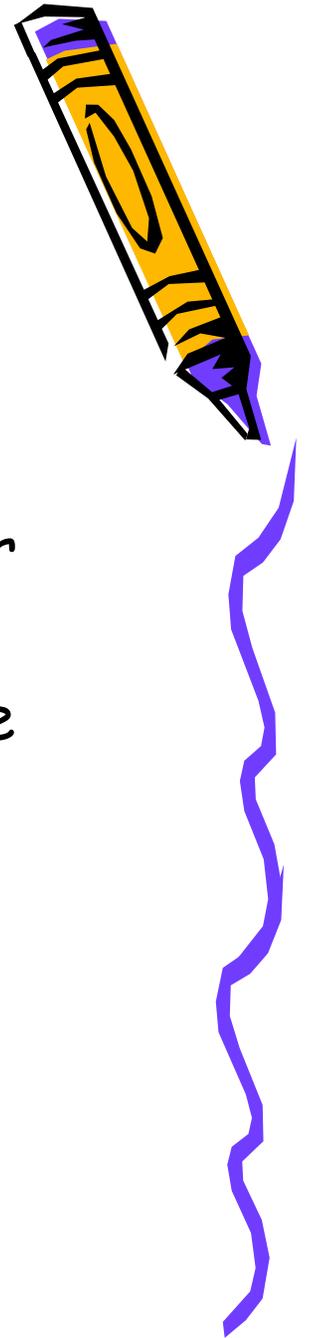
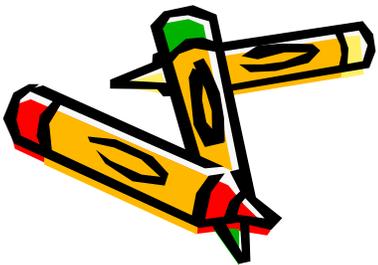
## Improving the Air Our Children Breathe

Toni Herring Bounds, PhD, MPH  
Director, Communicable & Environmental Disease Services  
East Tennessee Region  
Tennessee Department of Health  
Knoxville, TN



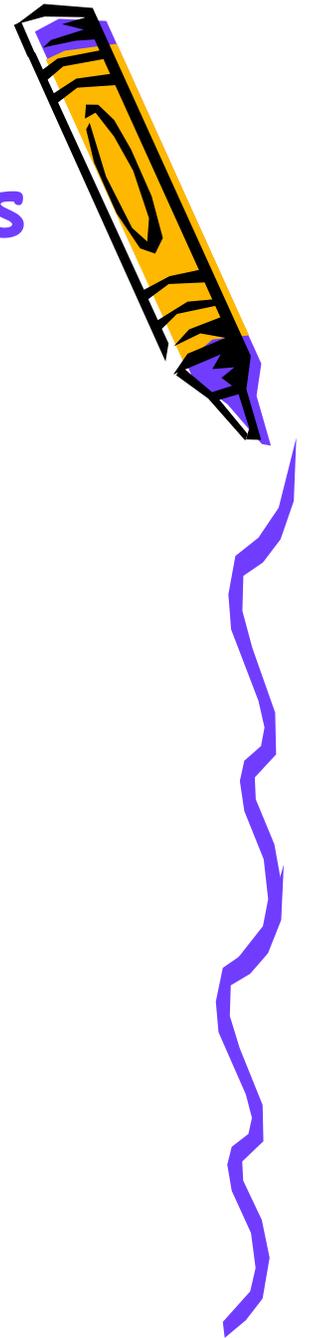
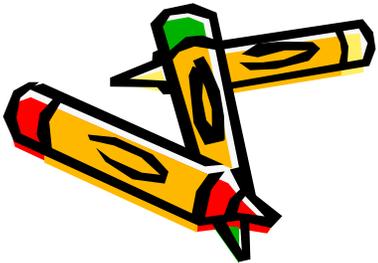
# Indoor Air Quality

- We spend 90% of our time indoors
- Indoor air quality is worse than ambient air quality
- EPA ranks indoor air pollution as one of the top five environmental health risks to the public
- Children are especially vulnerable



# Consequences of Poor Indoor Air Quality in Schools

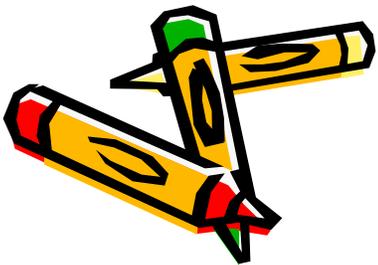
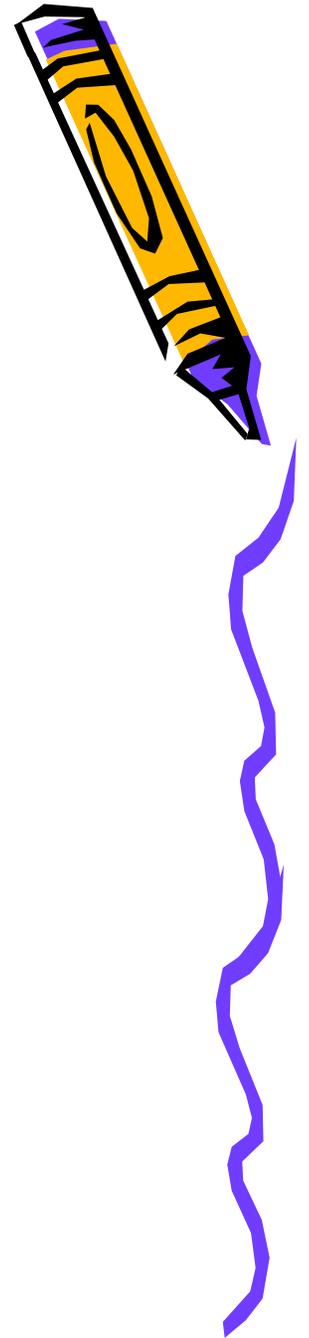
- Health problems
- Student and teacher performance
- Loss of public trust
- Liability issues
- Negative media coverage
- Accountability to school board and other officials



# Indoor Air Hazards

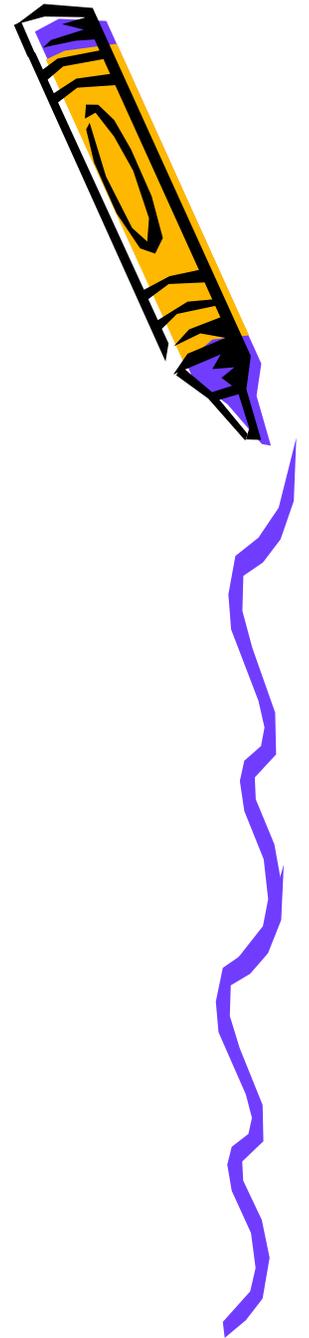
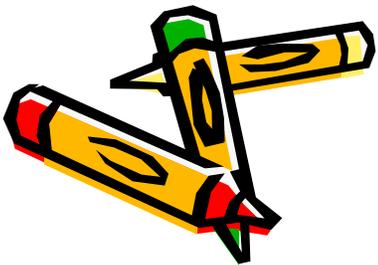
Building Materials  
Cleaning Agents  
Pesticides  
Copiers  
Allergens  
Dust Mites

Molds  
Bacteria/Viruses  
Radon  
Printers  
Lead  
Asbestos



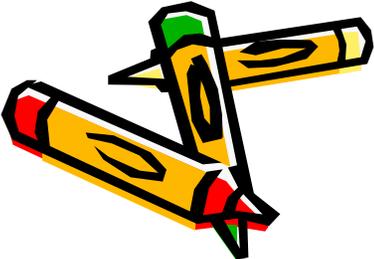
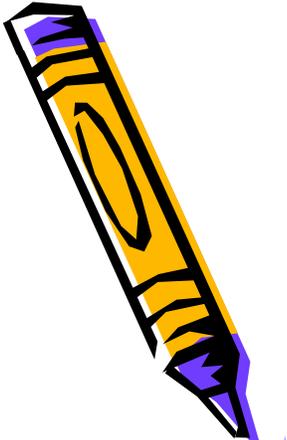
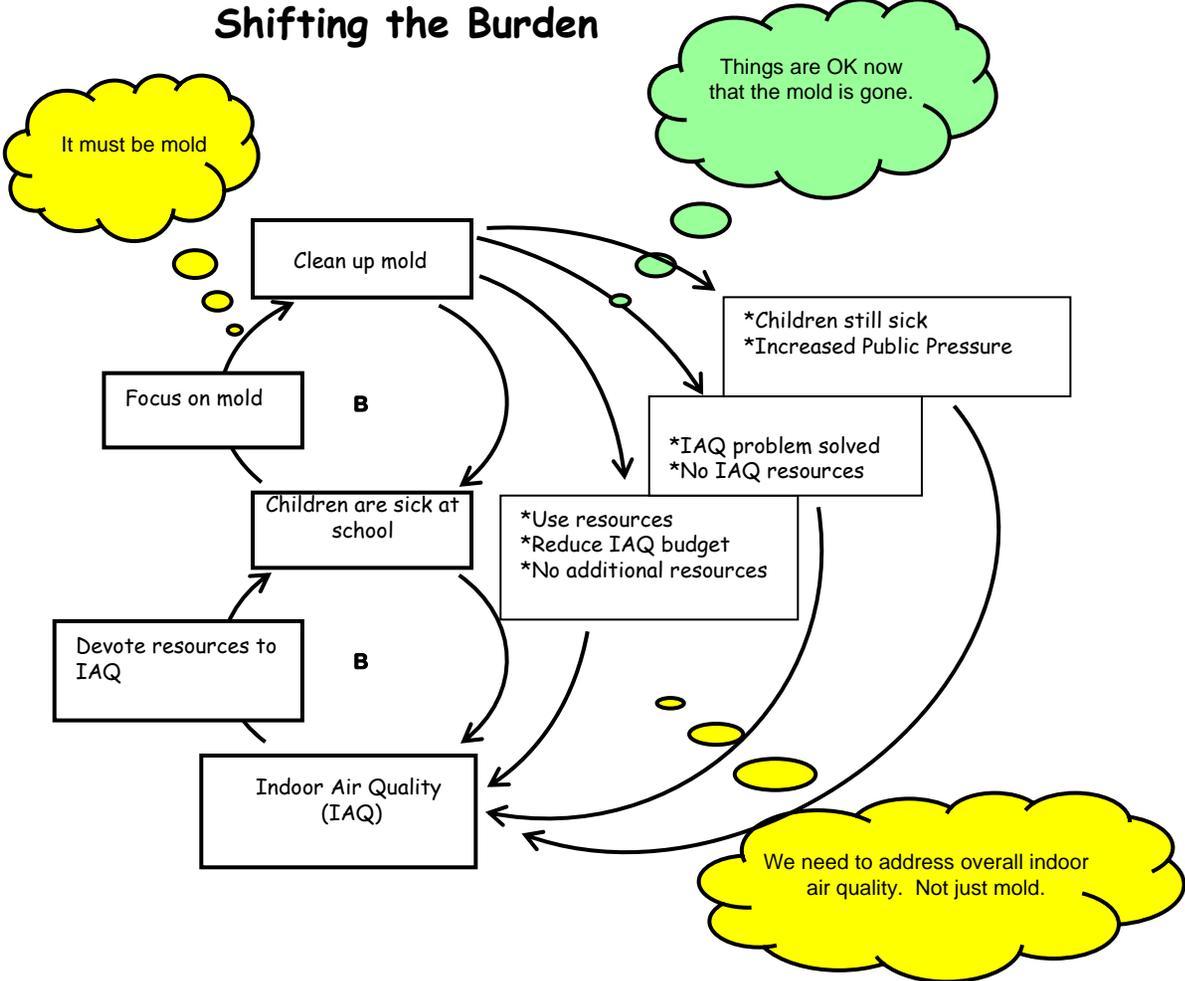
# Background

- East Tennessee Health Region receives complaints that children are sick at school
- Parents believe that mold is the problem
- Other indoor air quality hazards are not considered
- EPA recommends Indoor Air Quality Maintenance Programs



# Indoor Air Quality in Schools: Improving the Air Our Children Breathe

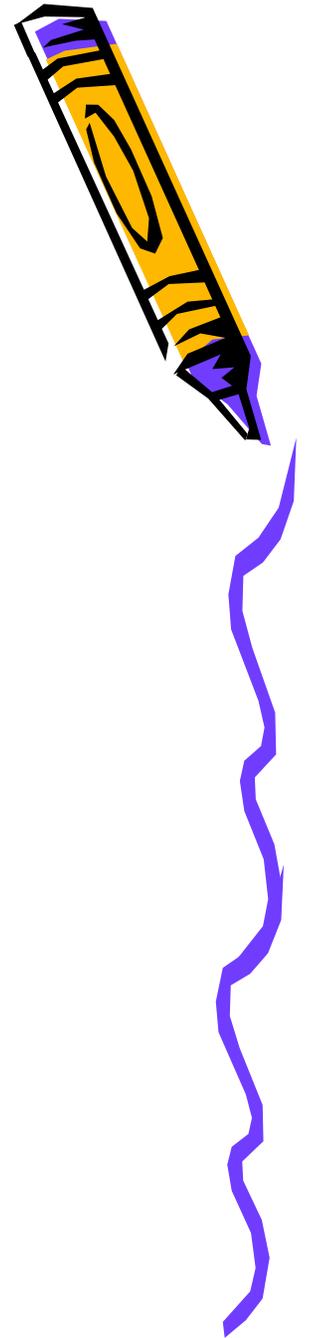
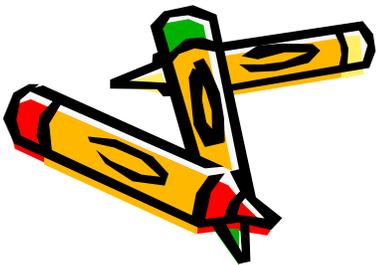
## Shifting the Burden



# Background

East Tennessee Health Region consists of:

- 15 counties
- 21 school systems
- 230 public schools
- 1600 school children

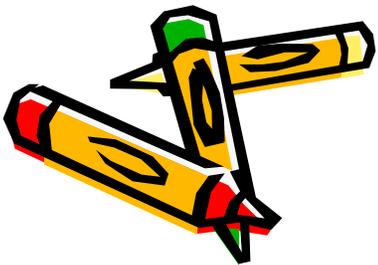


# Indoor Air Quality in Schools: Improving the Air Our Children Breathe



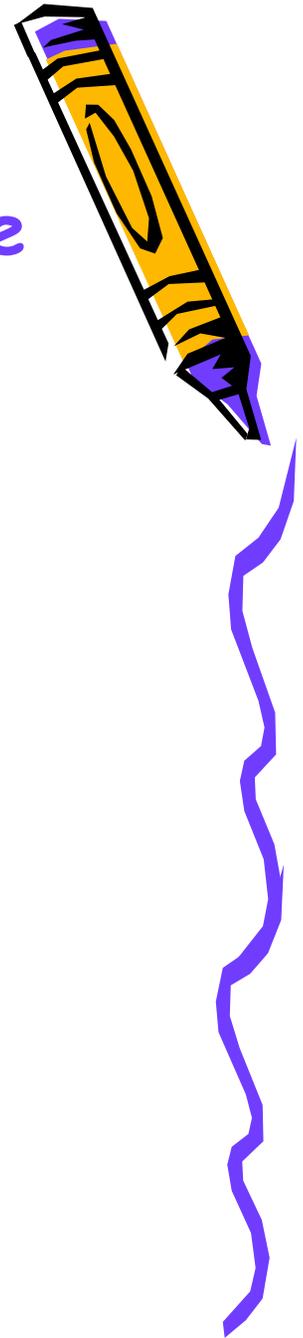
## Problem Statement:

East Tennessee Health Region school systems need Indoor Air Quality Management Systems to insure that schools have good indoor air quality providing a healthy environment for East Tennessee school children.



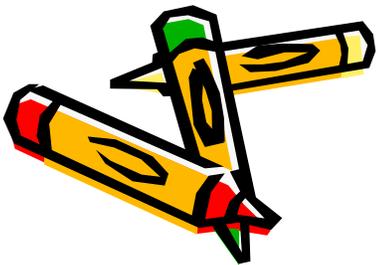
Toni Herring Bounds, PhD, MPH  
TN Department of Health

# Indoor Air Quality in Schools: Improving the Air Our Children Breathe



## Goal:

Increase the number of Indoor Air Quality Management Programs in the East Tennessee Health Region school systems



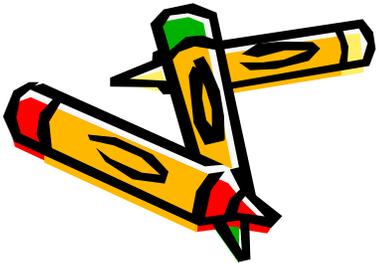
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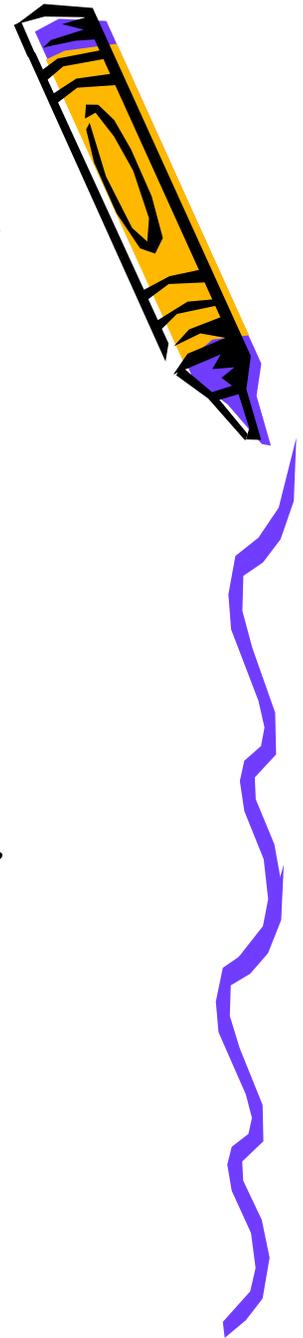


## Planned Events:

- Implement an indoor air hazards health educational program
- Establish associations of local organizations that will enable school systems to develop Indoor Air Quality Management Programs
- Implement Indoor Air Quality Management Programs in at least two East Tennessee Health Region school systems identified by the Indoor Air Quality Needs Assessment Survey

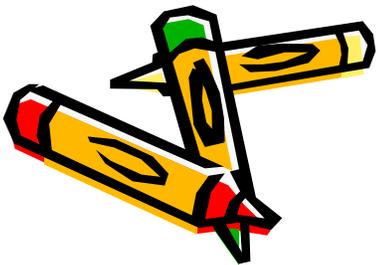


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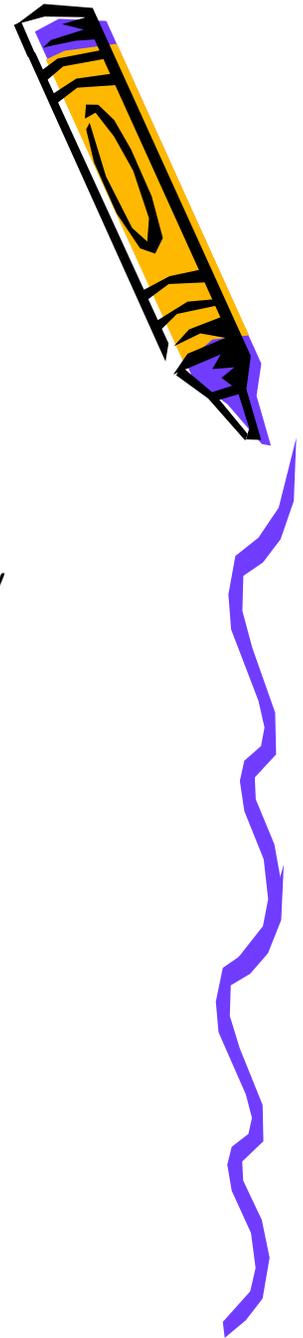


## Next Steps:

- Expand partnerships
- Develop resources (EPA Tools for Schools)
- Increase indoor air quality awareness
- Implement Indoor Air Quality Maintenance Programs in ETHR schools



# Indoor Air Quality in Schools: Improving the Air Our Children Breathe

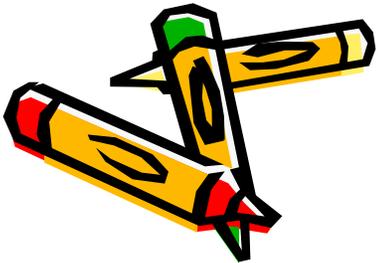


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- The Tennessee Department of Education. *The Tennessee School Report Card 2004*, Nashville, TN, May 2005.
- National Association of Counties. *The County Official's Indoor Air Quality Handbook*, The Indoor air Quality Program, Washington, DC. January 2005.

## Acknowledgements:

- Paul C. Erwin, MD, MPH (ET Health Region)
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- East Tennessee Health Region School Maintenance Directors
- Lashon Blakely (EPA District IV - Tools for Schools)



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